

What is claimed is:

[Claim 1] 1. An apparatus for reducing an engaging force of an engaging member for a bicycle component comprising:
a first engaging member;
a movable second engaging member;
wherein the first engaging member engages the second engaging member;
and
a biasing mechanism that applies a biasing force to bias the first engaging member and the second engaging member towards each other, wherein the biasing mechanism reduces the biasing force when the second engaging member moves.

[Claim 2] 2. The apparatus according to claim 1 wherein the biasing mechanism applies the biasing force to at least one of the first engaging member and the second engaging member at a biasing location, and wherein the biasing mechanism applies the biasing force to a different biasing location to reduce the biasing force when the second engaging member moves.

[Claim 3] 3. The apparatus according to claim 2 wherein the second engaging member comprises a positioning unit for a bicycle shift control device.

[Claim 4] 4. The apparatus according to claim 3 wherein the first engaging member comprises a positioning member that engages the positioning unit to maintain the positioning unit in a selected position.

[Claim 5] 5. The apparatus according to claim 4 wherein the biasing mechanism applies the biasing force to the positioning member.

[Claim 6] 6. The apparatus according to claim 5 wherein one of the positioning member and the biasing mechanism moves relative to the other one of the positioning member and the biasing mechanism to reduce the biasing force when the positioning unit moves.

[Claim 7] 7 The apparatus according to claim 6 wherein the positioning member moves in response to movement of the positioning unit.

[Claim 8] 8. The apparatus according to claim 7 wherein the positioning member moves relative to the biasing mechanism when the positioning unit moves so that the biasing mechanism applies the biasing force to the different biasing location.

[Claim 9] 9. The apparatus according to claim 8 wherein the positioning member moves together with the positioning unit when the positioning unit moves.

[Claim 10] 10. The apparatus according to claim 9 wherein movement of the positioning member causes the biasing mechanism to apply the biasing force to the different biasing location.

[Claim 11] 11. The apparatus according to claim 7 wherein the positioning unit comprises a plurality of positioning teeth, and wherein the positioning member comprises a positioning pawl that engages selected ones of the plurality of positioning teeth to maintain the positioning unit in the selected position.

[Claim 12] 12. The apparatus according to claim 11 wherein the positioning unit and the positioning pawl move relative to each other so that the positioning pawl moves over at least one of the plurality of positioning teeth, and wherein the biasing mechanism applies the biasing force to the different biasing location so that the biasing force is reduced when the positioning member moves over the at least one of the plurality of positioning teeth.

[Claim 13] 13. The apparatus according to claim 12 wherein the biasing mechanism increases the biasing force to the positioning member after the positioning member moves over the at least one of the plurality of positioning teeth.

[Claim 14] 14. The apparatus according to claim 13 wherein the biasing mechanism applies the biasing force to substantially the same biasing location before and after the positioning member moves over the at least one of the plurality of positioning teeth.

[Claim 15] 15. The apparatus according to claim 14 wherein the positioning pawl moves relative to the biasing mechanism when the positioning unit moves so that the biasing mechanism applies the biasing force to the different biasing location.

[Claim 16] 16. The apparatus according to claim 15 wherein the positioning pawl moves together with the positioning unit when the positioning unit moves.

[Claim 17] 17. The apparatus according to claim 16 wherein movement of the positioning member causes the biasing mechanism to apply the biasing force to the different biasing location.

[Claim 18] 18. The apparatus according to claim 17 further comprising a mounting member that supports the positioning unit and the positioning pawl, and wherein the biasing mechanism is secured relative to the mounting member.

[Claim 19] 19. The apparatus according to claim 18 wherein the positioning unit rotates to move the positioning pawl.

[Claim 20] 20. The apparatus according to claim 19 wherein the biasing mechanism comprises a spring.

[Claim 21] 21. The apparatus according to claim 20 wherein the biasing mechanism comprises a coil spring.

[Claim 22] 22. The apparatus according to claim 20 wherein the biasing mechanism comprises a leaf spring.

